

AMENDMENT TO THE CLAIMS

19. (Original) An electronic assembly comprising:
a substrate having a plurality of conductive signal lines formed adjacent the substrate;
a plurality of free-standing resilient electronic interconnection elements coupled to the signal lines, each interconnection element comprising:
a first structure of a first material having a first spring constant, the first structure capable of being free-standing by itself, the first spring constant high enough for repeated elastic displacement without substantial plastic deformation, and
a second structure of a lithographically-patterned second material coupled to the first material such that the first material and the second material together have a second spring constant greater than the first spring constant.
20. (Original) The electronic assembly of claim 19, wherein the shape of each of the plurality of interconnection elements comprises an anchor portion adapted to be coupled to the substrate and a free portion.
21. (Original) The electronic assembly of claim 20, wherein a portion of each of the free-standing portions of each of the plurality of interconnection elements comprises a contact tip portion, further comprises:
an insulating material overlying a portion of the free-standing portion and a conductive material overlying the insulating material and electrically coupled to the electronic component.
22. (Original) An electronic assembly including a plurality of the interconnection elements, the assembly comprising:
a substrate,
a plurality of signal lines associated with the substrate,
a plurality of the interconnection elements, each interconnection element comprising:
a first structure of a first material having a first spring constant, the first structure capable of being free-standing by itself, the first spring constant high enough for repeated elastic displacement without substantial plastic deformation, and
a second structure of a second material coupled to the first material by lithographic techniques such that the first material and the second material together have a second spring constant greater than the first spring constant, with selected ones of the plurality of interconnection elements electrically connected to selected ones of the plurality of signal lines.

23. (Original) An electronic system comprising:
a first electronic component comprising:
a substrate,
a plurality of signal lines associated with the substrate,
a plurality of the interconnection elements, each interconnection element comprising:
a first structure of a first material having a first spring constant, the first structure capable of being free-standing by itself, the first spring constant high enough for repeated elastic displacement without substantial plastic deformation, and
a second structure of a second material coupled to the first material by lithographic techniques such that the first material and the second material together have a second spring constant greater than the first spring constant, with selected ones of the plurality of interconnection elements electrically connected to selected ones of the plurality of signal lines; and
a second electronic component connected to the first electronic component.
24. (Original) A method of making electrical contact between two components comprising:
coupling a first component having one or more of the interconnection elements of claim 1 formed on a surface thereof to contact pads of a second component to establish a conductive path between the first component and the second component.
25. (Original) The method of claim 24, wherein the coupling is one of a temporary connection and a permanent connection.
26. (Original) The method of claim 25, wherein the coupling comprises:
aligning the first component and the second component such that the one or more interconnection element is elastically displaced.

Claims 27-32 (Canceled).

CONCLUSION

In view of the foregoing, examination of the elected claims is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: 8/25/04

William V. Babbitt
William Thomas Babbitt, Reg. No. 39,591

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(310) 207-3800

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Nedy Calderon
Nedy Calderon

8/25/04
Date